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SDCS-ER-75-26

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT ✓
Eastern Kazakh, 30 June 1975

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September 1975

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405 601

SDCS Event Report No. 26

Eastern Kazakh, 30 June 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	Origin Time	Latitude	Longitude	m_b	M_s
NORSAR	03:26:31	47.3N	081.6E	4.9	N/A
LASA	03:26:58	48.5N	079.6E	4.6	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitude become

03:27:07	51.2N	078.7E	4.5	N/A
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All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at WH2YK, RK-ON, HN-ME, LASA and NORSAR. High level background noise precluded definite determination of signal arrivals at FN-WV and CPSO.

Analysis of the SDCS, LASA and ALPA long-period data failed to produce recognizable signals associated with this event. The north-south LP horizontal instrument at CPSO was inoperative and the LP vertical at HN-ME was pulsing due to moisture in the data coils. Long-period array data from NORSAR was unrecoverable as were the LP radial beams from LASA and ALPA.

Details of the program used to obtain beamed vertical, radial and transverse long-period data at LASA and ALPA are in the process of being reviewed. Vertical beams are probably valid while horizontal beams are questionable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SECS	ELEVATION METERS	INSTRUMENTATION	
				SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65 14 00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35 41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41 19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09 43.0 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41 41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

HYPOCENTER DETERMINATION

INPUT FOR EVENT 30 JUN 75
03:27:00.0 49.000N 78.000E 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST	REST	REST
NAC	03 34 20.8	0.3	-0.1	37.5	311.7
WH2YK	03 37 48.9	0.5	0.3	65.2	17.5
RK-CN	03 39 06.1	-0.9	-0.5	78.1	355.1
HN-ME	03 39 11.2	0.5	0.5	78.8	337.1
IAC	03 39 29.5	0.4	-0.2	82.4	3.4

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
NC CCNVERGENCE ON CALC RUN						
03:27:05.4	50.986N	78.813E	-0. CALC	0.6	16	5
03:27:06.9	51.212N	78.704E	0. REST	0.4	4	5

CALC
2 . 2
1 . 0
0 0. 0 0
0
0 0. 0 0
0 . 0
0 . 0

REST
2 . 2
1 . 0
0 0. 0 0
0
0 0. 0 0
0 . 0
0 . 0

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 0.97
MAJOR 304.8KM. MINOR 41.7KM. AZ= 178 AREA= 39965 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 30 JUN 75
 03:27:00.0 49.000N 78.000E OKM.

STA.	PHASE	ARRIVAL		INST	FEE	A/T	MAGNITUDE		DIR	DIST
		TIME					ME	MS		
NAC	EP	03 34 20.8		AE	0.6	22.	4.54			
WH2YK	EP	03 37 48.9		SPZ	0.6	5.	4.40			37.5
RK-ON	EP	03 30 06.1		SPZ	0.4	12.	4.67			65.2
HN-ME	EP	03 39 11.2		SPZ	0.8	11.	4.56			78.1
LAC	EP	03 39 29.5		AE	0.9	5.	4.34			78.8
										82.4

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA
03:27:06.9	51.212N	78.704E	0. REST	4.50	0.13	5

WH2YK 30 JUN 75

03:37:48.9

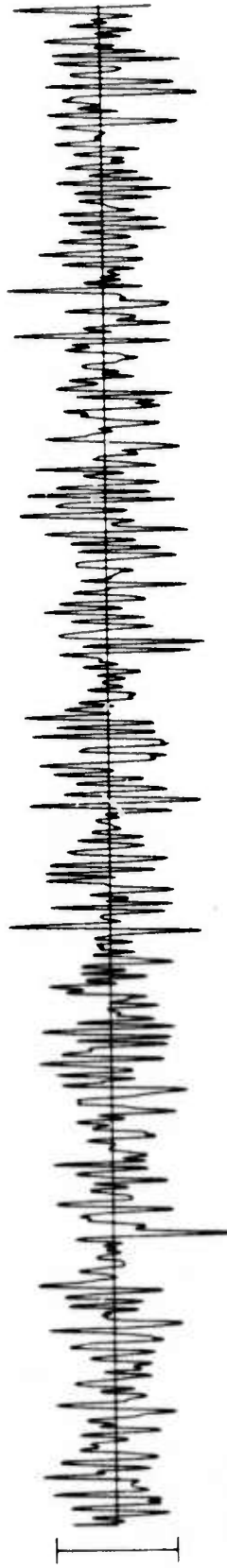
SPZ
5.26 Mμ



SPR
4.67 Mμ



SPT
4.71 Mμ



TIME



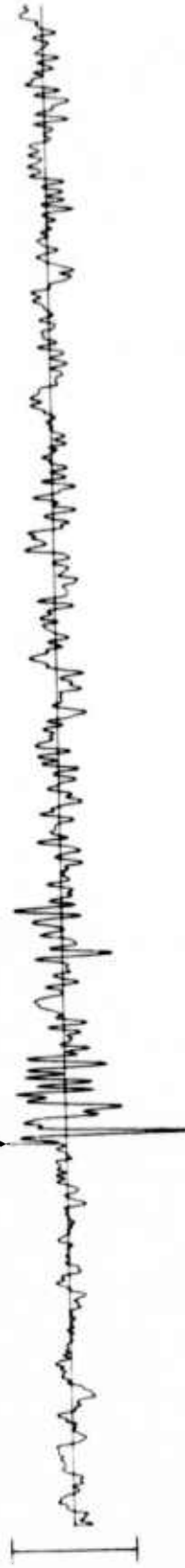
03:38:00

10 SEC

RK-ON 30 JUN 75

03:39:06.1

**SPZ
15.84 Mμ**



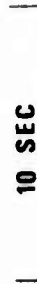
**SPR
4.08 Mμ**



**SPT
5.30 Mμ**



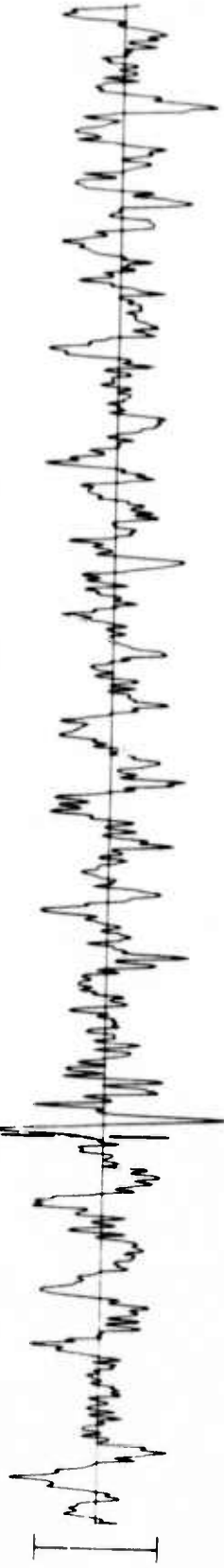
10 SEC



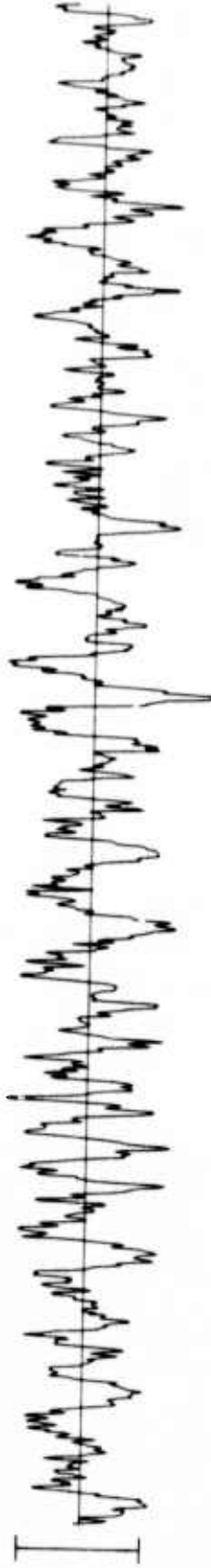
HN-ME 30 JUN 75

03:39:11.2

SPZ
7.61 Mμ



SPR
4.62 Mμ



SPT
7.64 Mμ



TIME

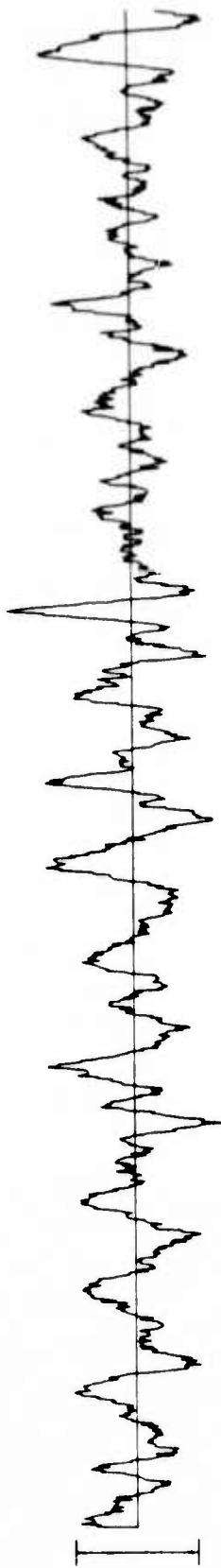


10 SEC

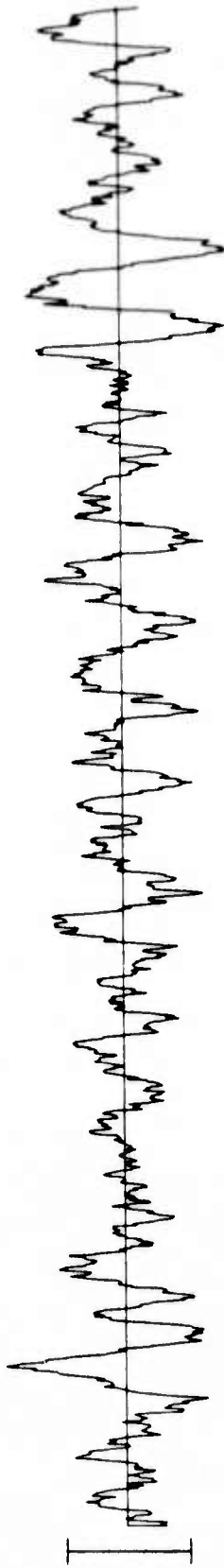
03:39:30

FN-WV 30 JUN 75

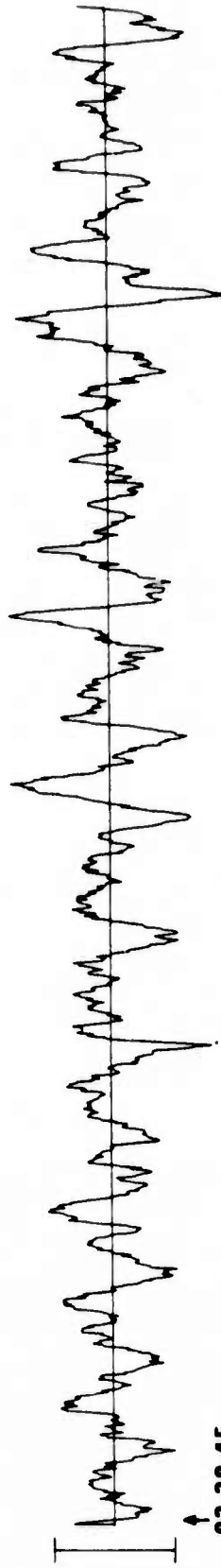
SPZ
13.40 M μ



SPR
7.15 M μ



SPT
11.44 M μ



03:39:45

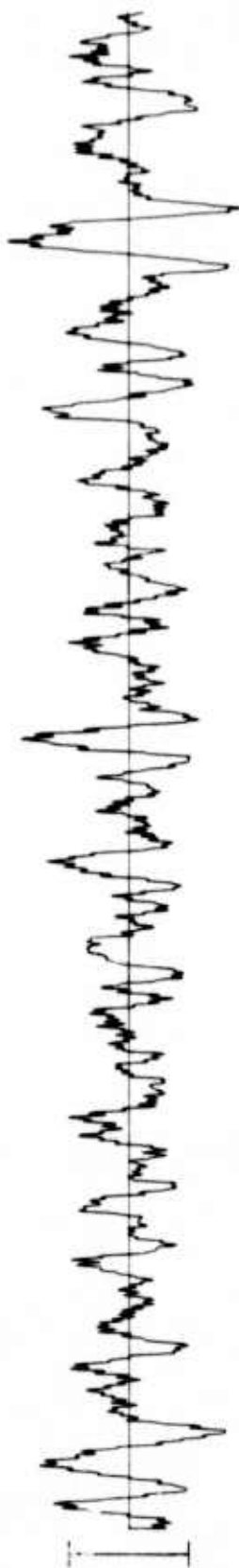
10 SEC

CP-S0 30 JUN 75

SPZ
13.28 Mμ



SPR
11.07 Mμ



SPT
3.57 Mμ



TIME



03:40:40

10 SEC

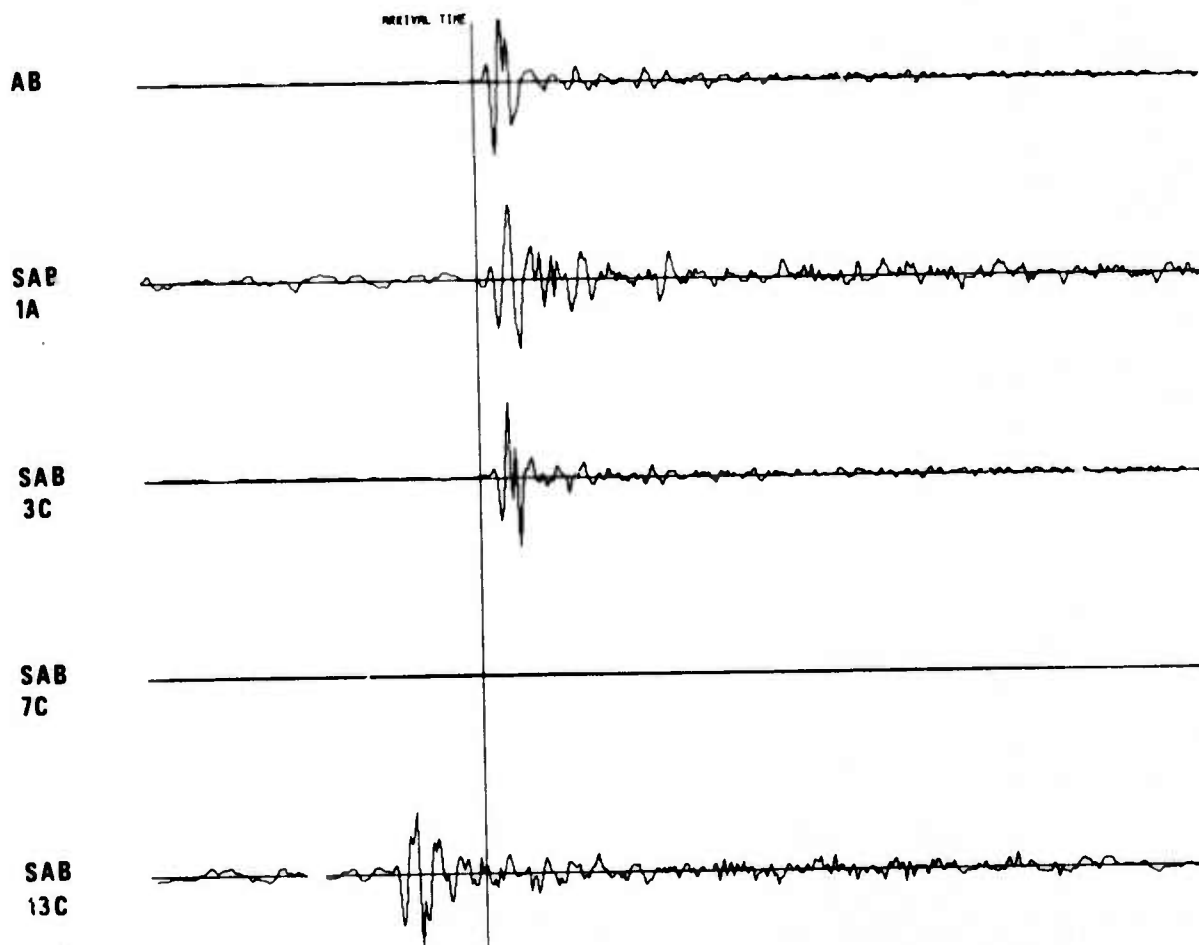
NORSAR EVENT FILE

1975 JUN 30

EPX NO. 22090 ARR. 3.34.20.4 47.3N 81.6E 4.9MB 33KM

DIST = 41.5 AZI = 75.7 AMP = 19.3 PER = 1.0 UMETH 2

SCALE  = 5 SECONDS



LASA

1 30 JUN 1975

2 3 26 57 48.5N 79.6E 330 C 4.4 329 EASTERN KAZAKH SSR

3 3 39 29.0 LAO P 2.1 0.6 22.4 85.2 356.1

EPX 38870

BP-B 0.6-2.0 HZ

ABN 8.6

03:39:19.0

AB 13

FAB 12

WAB 12

PAB1 9.8

PAB2 15

PAB3 17

PAB4 9.0

10 SEC

WH2YK 30 JUN 75

LPZ
146.44 MHz



LPR
602.30 MHz



LPT
413.10 MHz



TIME



04:00:00

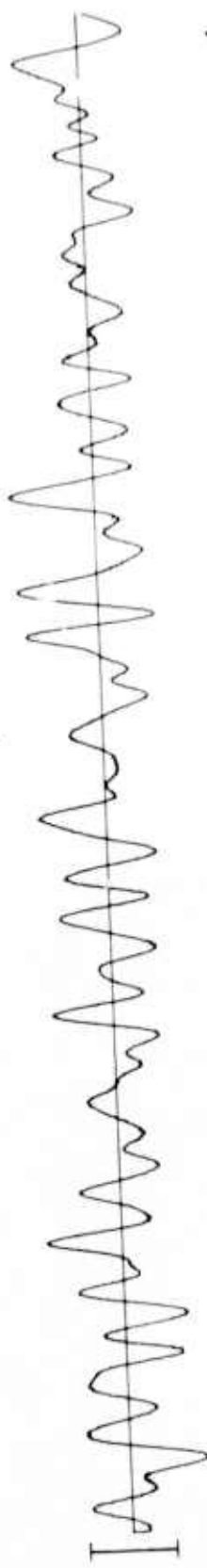
2 MIN

RK-ON 30 JUN 75

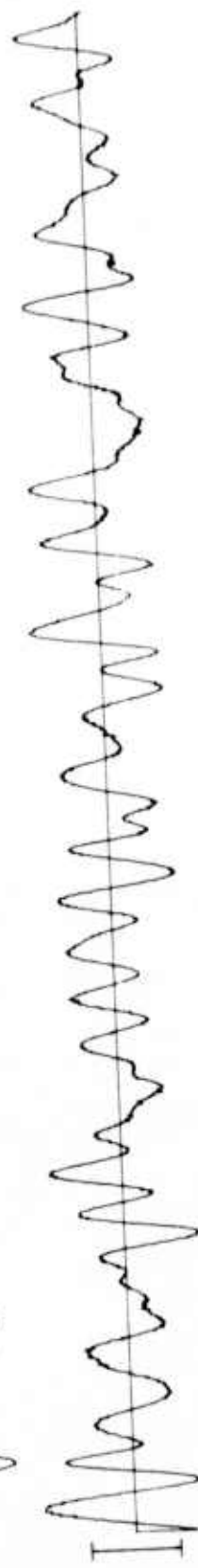
LPZ
235.95 MHz



LPR
880.64 MHz



LPT
802.16 MHz



↑
04:06:50

2 MIN

HN-ME 30 JUN 75

INSTRUMENT
PULSE

LPZ
UNKNOWN

LPR
2770.43 MHz

LPT
1409.53 MHz

TIME

2 MIN

INSTRUMENT AND CALIBRATION PROBLEMS

04:17:00

FN-WV 30 JUN 75

LPZ
1444.20 MHz



LPR
3273.52 MHz



LPT
7694.88 MHz



04:11:58

TIME



2 MIN



CP-SO 30 JUN 75

LPZ
131.49 MHz



LPN
UNKNOWN



LPE
174.40 MHz



TIME



2 MIN

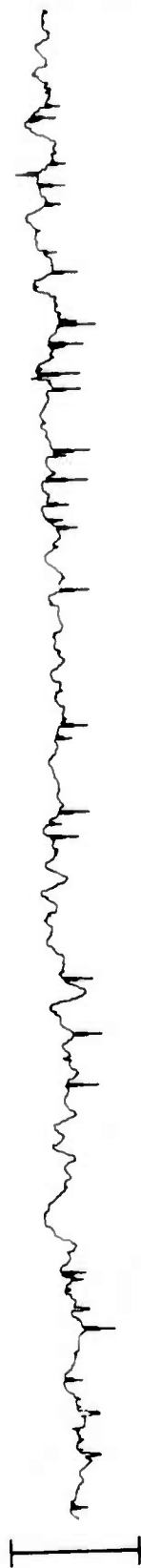
INSTRUMENT INOPERATIVE

04 25:00

ALPA LONG-PERIOD BEAMS 30 JUN 75

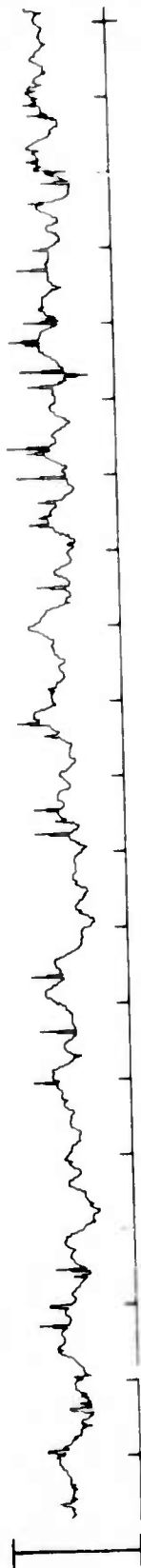
LP VERTICAL

94.28 Mμ



LP TRANSVERSE

57.94 Mμ



03:53:08.0

1 MIN

RADIAL CHANNEL NOT RECOVERABLE

LASA LONG-PERIOD BEAMS 30 JUN 75

LP VERTICAL

96.77 M μ



LP TRANSVERSE

68.83 M μ



04:05:22.0

1 MIN

RADIAL CHANNEL NOT RECOVERABLE